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STEREO

THE GERMAN HIFI MAGAZINE

ISSUE #22 2019



> LUXMAN CL-38UC & MQ-88UC CUTTING-EDGE RETROPHILE

> POWER AND BRAINS CANTON SMART VENTO 9



REVIEWS: DYNAUDIO EVOKE10 & 30 +++ CLEARAUDIO
INNOVATION COMPACT & TANGENTIAL VS. RADIAL
+++ MUSICAL FIDELITY M2SI/M2SCD +++ THORENS
TD202 +++ KLEI CABLES +++ **REPORT:** HIGH END 2019

SPRING FEVER



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The hi-fi industry was not quite as badly hit by the smartphone-boom as for example the photo industry. On the contrary, it increasingly understands how to use this platform as a bridge. That is a plausible development when you consider how much music is now being listened to on the go and how much higher the technical level is – or could be – at home. This trend was also apparent at this year's High End in Munich, which took place from May 9th to May 12th in the M.O.C..

In numbers this year's High End consisted of 551 exhibitors from 42 countries (+3.8%), 21,180 visitors (+6.5%) – the High End is entirely open to public – as well as 8,208 trade visitors from 72 countries (+8.6%).

This demonstrates how the Munich show has been increasing its international relevance with every year, but also how it kept growing noticeably overall. And that not only in numbers, but also in quality, as countless top ratings indicate. These developments have been so noticeable that Berlin and Las Vegas are likely to feel the effect in the audio but also and especially in the high-end audio sector. Munich has undoubtedly become THE top meeting place for the scene.

This year, it was particularly striking that where in the past trench warfare separated tube and transistor amplifiers, Class A from Class D, CDs from records, direct from belt drives or electrostats from horns, the focus was now more on the shared higher goal. Even the music demonstrations became not only – on average – more “expensive”, but actually also better. A development that was urgently necessary, because when trained ears meet a 700,000 Euro system and one has to explain why the musical result doesn't put one in an euphoric-enthusiastic mood, a classification into the “maniac”-category is unfortunately not too far fetched.

However, as we all know, it is not always necessary to invest a lot of money in order to make at least harmonious results come true.

At the show STEREO met Steve R. Rochlin, the mastermind behind the internationally renowned audio online portal “Enjoythemusic.com”, and agreed on a close and mutually fruitful cooperation for the future as a partner magazine.

This High End with its extremely positive mood and excellent figures stood for a “spring fever” of this sensual, experience-/ enjoyment-oriented and life-affirming industry. Good sound is quality of life!

Tom Frantzen

editor@stereo-magazine.com

All prices listed in this magazine are German retail prices incl. VAT valid at the time of evaluation.



CANTON SMART VENTO 9

In Canton's active SMART Vento 9, four power amplifiers deliver a combined 600 Watts. Together with the many intelligent features this digital floorstander is guaranteed to cheer you up!



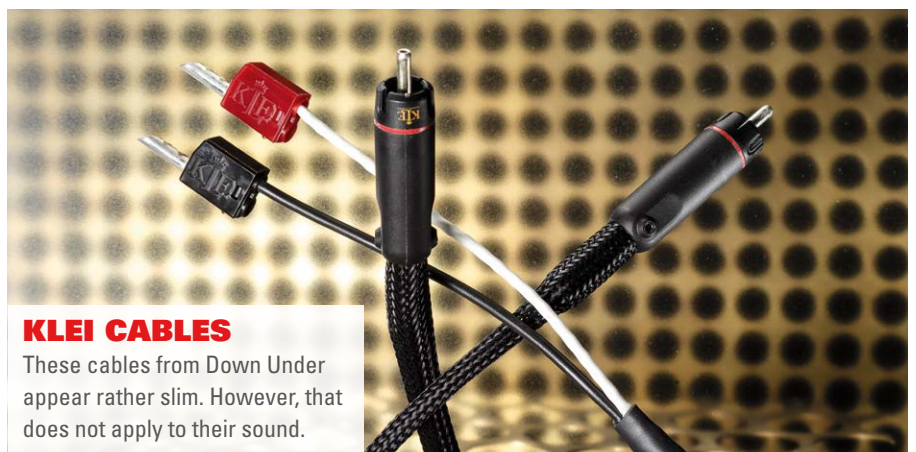
CLEARAUDIO INNOVATION COMPACT & TONEARMS

We used the opportunity of testing the Clearaudio Compact Innovation turntable to stage a contest of tonearm-concepts: radial („Tracer“) vs tangential („TT5“).



LUXMAN CL-38UC & MQ-88UC

With its traditional design this pre-/power amp duo has built itself a shortcut into the hearts of nostalgics. But they can just as well meet modern standards!



KLEI CABLES

These cables from Down Under appear rather slim. However, that does not apply to their sound.



MUSICAL FIDELITY M2SCD & M2SI

This combination of CD-player and amplifier is not only affordable but also offers everything you need to enjoy music.



THORENS TD202

Also under new leadership Thorens continues to build great turntables at a beginner-friendly price. The TD202 even has phono-pre and USB-out on board.



DYNAUDIO EVOKE10 & 30

The new Evoke Speakers from Denmark might not be the biggest eye-catchers on the market, which makes their musical performance all the more astounding.



HIGH END 2019

The High End in Munich was once again a meeting ground for the who is who of the hi-fi world. STEREO has compiled a selection of highlights for you.

Brinkmann Audio Taurus

Ultimate Direct Drive



Photo © MichaelRasche.com 2019

Ever since the Brinkmann Oasis launched the Direct Drive Renaissance a decade ago, analog aficionados have asked us for a Direct Drive turntable that rivalled the performance of our state-of-the-art Balance.

The new Taurus definitively addresses that demand. Built on a massive 40mm thick chassis inspired by Balance, Taurus delivers deeper, more visceral bass combined with the dynamic agility and forward drive which characterize all Brinkmann direct drive turntables. Taurus offers wireless speed selection and can accommodate either one or two tonearms without modification.

Taurus is unquestionably the finest Direct Drive turntable Brinkmann has ever built.

BRINKMANN

"The World's Finest Turntables ... and more!"

brinkmann-audio.com

AMC CD player with tube option

Being called XCDi SE, it is equipped with a new pure CD slot-in drive. The electronics include a Burr Brown D/A converter and a discrete Class A output stage. Storage media can be connected via the USB-A socket and the SD card slot. In this version the AMC player including remote control costs close to 600 Euro. Optionally, the device is also available as a „vt“ (vacuum tube)-version with a tube output stage. The „vt“ costs around 1000 Euro.

www.audium.com



Quadral: top-mounted loudspeakers

If you want to expand your surround system into the 3rd dimension, you can do so easily with the new Quadral „Phase A15“ top-mounted loudspeaker. The height-adjustable full-range speaker radiates sound to the ceiling, which reflects it downwards. Alternatively, the Phase A15 can also

be mounted as a conventional rear speaker on the rear wall. The closed cabinet is equipped with a 16 cm full-range chassis, has an impedance of 8 ohms, is only 16 cm wide and is available for 200 euros in high-gloss black or white.

www.quadral.com



Amarra for Windows now with Qobuz

Peu à peu, Sonic Studio is bringing the still young Windows version of its software player „Amarra Luxe“ closer to the Mac version. The latest update for Amarra Luxe for Windows now offers access to the streaming service Qobuz in addition to Tidal. Tidal subscribers cannot yet decode MQA files in Amarra Luxe for Windows. This feature is still on the to-do list. New in the Mac version of Amarra Luxe is the possibility to integrate AU plug-ins.

www.sonicstudio.com/amarra

Amarra™



Preamp with changeable DAC

For self-explanatory reasons, nobody wants to change expensive HiFi devices every few years just because there are new digital formats or resolutions. McIntosh has therefore equipped its new C49 preamplifier with an exchangeable DAC module. This is the DA1 module with two S/PDIF coaxial and two optical inputs, a USB port for the PC and the proprietary MCT interface for connecting the McIntosh CD/SACD drives. The DAC slot can handle PCM sampling rates up to 384 kHz and DSD bit rates up to 11.2 MHz. For analog sources, the C49 offers two balanced and three cinch inputs as well as one phono input each for MM and MC pickups. The outputs are also available in XLR and Cinch. The C49 will be launched this summer and will cost around 6350 Euro (in Germany).

www.mcintoshlabs.com

Wharfedale launches new classic edition

The British loudspeaker specialist Wharfedale revives the design of the 1960s and launches the „Linton“ model as a „Heritage“ version. The three-way bass reflex speaker is 30 cm wide and 56 cm high and is best placed on the optional stands. It is equipped with a 20 cm bass driver, a 13 cm midrange driver with Kevlar cones and a dome tweeter. mahogany and walnut finishes are available. Wharfedale is one of the oldest loudspeaker manufacturers and is considered the inventor of the multi-way principle. The pair price of the 6 Ohm speakers is 1000 Euro or 1300 Euro with stands.

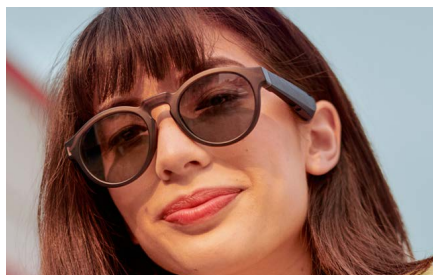
www.wharfedale.co.uk/



Sunglass-headphones

Bose contributes a very special product to the current „True Wireless“ headphones trend: the transducers, along with the battery and microphone, are built into the temples of the sunglasses known as „Bose frames“. They are not stuck in the ear canal, but radiate the sound directly into the auricle. According to Bose, outsiders shouldn't hear anything. Siri and the Google Assistant can be controlled, calls and voice commands can be made and songs can be

paused or skipped via a multifunction button. Using the GPS data from the coupled smartphone and the built-in head movement sensor, the glasses determine the user's whereabouts and viewing direction and whisper information about sights etc.



into his ear. One battery charge should last for 3.5 hours of music. The glasses are available in two designs and with various interchangeable lenses, all of which are designed to provide 99% UV protection. It weighs only 45 grams and will be on sale in Germany at the end of May for 230 euros.

www.bose.com

Ken Ishiwata leaves Marantz

After 41 years as a leader at Marantz, Ken Ishiwata will leave the company in May 2019. The contract between Marantz and Ken Ishiwata has expired and „both parties have agreed that from now on everyone will go his own way“, says the parent company Sound United. Ishiwata had started his career in the hi-fi industry at Pioneer in 1968, later went into business for himself as a fashion photographer and joined Marantz in 1978 as technical coordinator. Since 1996 he has been a „brand ambassador“, who not only represents the brand to the outside world, but also actively trims and optimises new models in the listening room of the EU headquarters in Eindhoven. The best of these products even bear his initials in the type designation, such as the CD63mkII KI CD player, the PM66KI integrated amplifier and the „KI Ruby“ series.

www.marantz.com



Components from 250 Euro

Cambridge Audio has launched a new entry-level series, consisting of 2 integrated amplifiers, 2 CD players and 2 stereo receivers. The AXA25 integrated amplifier, which offers 5 line inputs and an output power of 25 watts to 8 ohm speakers, costs 250 euros. The AXA35 (350 Euro) offers a little more power and an additional phono input. The two CD players essentially differ in the digital coax output, which the AXC35 (350 Euro) has ahead of the AXC25 (250 Euro). Both receivers are equipped with phono input, FM tuner and an integrated Bluetooth receiver, the AXR100 (500 Euro) additionally with optical and coaxial digital inputs. It provides 100 watts at 8 ohms, while the AXR85 (400 euros) is specified with 85 watts. All components of the AX series are available in „Lunar Grey“ in the Cambridge audio web shop as well as in specialist shops — players and amplifiers already in June, receivers from July.

www.cambridgeaudio.com



Headphones with Air Motion Transformer

30 years ago, HEDD boss Klaus Heinz presented the first fully developed AMT tweeter, based on the „Air Motion Transformer“ technology from Oskar Heil. Now he has further developed the AMT principle for full-range reproduction and uses it in the „HEDDphone“. „Air Motion Transformers“ work with a folded diaphragm, which can move air much faster than conventional converters with voice coil drives or flat diaphragms. The HEDDphone should be able to reproduce frequencies from 10 Hertz to 40 kHz. The ear-closing receiver has an impedance of 38 Ohm and is connected via mini XLR plugs. It is expected to be available in the third quarter of 2019 and will cost well over 2000 euros.

www.hedd.audio



QUIETER AND STRONGER



In many audiophile circles, it is commonly believed that power conditioners and various other power-line accessories often do more harm than good, robbing the music of its vitality, color, and that oh-so-important, wildly intangible "boogie factor."

AudioQuest's **Niagara Low-Z Power Noise-Dissipation Systems** are designed to do the exact opposite. Niagara kills the noise while *honoring* the music, so that the listening experience can be exactly as it should be: compelling, immersive, *fun*.

"The difference was huge. AudioQuest's Niagara 1000 not only cleaned up the power, it did everything that is the *opposite* of killing the boogie.... It was as if my system had gotten a heart-shot of adrenaline."

— Herb Reichert,
Stereophile,
April 2017



audioquest®



Charming Duo

For many hi-fi fans, the new retro looking Luxman tube-duo is guaranteed to be love at first sight. What about first listen? STEREO is testing whether the CL-38uC preamplifier and the MQ-88uC power amplifier will please nostalgics in particular or whether they can satisfy modern demands just as well.

Matthias Böde

No other Japanese large-scale producer has existed as long as the Luxman Corporation whose origins date back to 1925 and to the launch of broadcasting in the Land of the Rising Sun. Since then, the Osaka-based company has enriched hi-fi history with countless highlights. Hardly any other brand cultivates its tradition so lovingly and competently – also and especially under the umbrella of the „International Audio Group“ (IAG), of which Luxman has been a largely independent member since 2009.

A current example is the 2011 introduced CL-38u/MQ-88u tube pre-amplifier/amplifier combination, which has been thoroughly updated in comparison to its predecessors. Now, it is also available as a „C“(ustom)

version in the design of days gone by, based on Luxman's CL-35/MQ-60 amplifiers from 1970/'69. The power amplifier in particular perfectly resembles its famous ancestor. However, also the preamplifier with its beautifully „antiquated“ toggle switches, has been enclosed into a traditional wooden cabinet and is retro through and through.

Certainly, anyone who doesn't know their way around will think the duo is a vintage system in immaculate condition. Especially so, as the infrared sensor for the simply equipped remote control is hidden inconspicuously on the finely brushed, shimmering front panel of the preamplifier.

Phono with tubes & transformers

It has been an utter pleasure to fiddle around with the three-stage switchable tone controls, which can also be turned off entirely. Such features are very rarely to be found nowadays! The fact that the „mute“ button operates a modern relay remains unnoticed until you press it. There is a tape output with tape monitoring and a filter against subsonic interference, which tubes hate even more than transistors.

In addition to its five high-level inputs – one of which is a complex transformer-balanced, invertible XLR input – the Luxman-Pre also offers a tube-based phono MM/MC stage of excellent sound quality – at least when operated correctly. Those who prefer MMs should make sure that their output voltage is high enough, as the CL-38uC likes its phono stage to be fed rather generously.

Otherwise its colors turn somewhat pale and its vibrancy gets muffled. We therefore don't necessarily recommend high-output MCs. Ortofon's 2M Bronze, on the other hand, was a perfect match.

The performance turned even better when using a suitable MC. As if it weren't traditional enough already, the Luxman increases the tiny MC currents with two sets of transformers that aid the tubes. They thank the support with an improved noise and distortion behavior. On the front panel there is a toggle lever for „High“ or „Low“, which apparently indicates the termination resistance, as the amplification is higher in „Low“.

In „High“-mode, the playback was comparatively slim and less vibrant. This restrained character changes instantaneously when switching to „Low“. Now music from records had the punch and expression that the titles of the parallelly played CDs radiated. However, you should choose an MC that works with the „Low“ impedance due to its low internal resistance. The CL-38uC becomes a captivating vinyl expert with one of the „tested devices“ mentioned on the side.

Quality tubes from JJ

The eight employed double triode tubes (3xECC83S/ 5xECC82) come from the Slovakian quality supplier JJ and should easily last two decades, if not longer, in normal operation. Afterwards replacement is

The fixed and variable inputs of the power amplifier can be individually switched. There are separate terminals for four, eight and 16 ohm speakers.



THREE BUTTONS

The remote control supplied with the CL-38uC has only buttons for volume control and mute.



BEHIND BARS

The MQ-88uC comes out of the box with a grid that protects not only children's hands from the hot tubes and vice versa. If desired, it can be easily removed.



easy. Luxman uses the tubes in the phono, tone control and main amplification circuits in **SRPP** arrangement, which is intended to produce a particularly low output impedance through the serial connection of two tubes at a time – very important for controlling the following output stage. Luxman indicates a good 300 Ohm here. Our laboratory even measured a significantly lower 130 Ohm, which is close to spectacular for a tube pre.

The CL-38uC features two cinch outputs, which simplifies possible bi-amping, and it can of course control any type of power amplifier or active speaker. However, of course, it is predestined for the MQ-88uC, which also has two inputs to choose from. The „Direct“ input is intended for operation from a preamplifier. The input named „Variable“ is connected to a volume potentiometer. You can, therefore, connect the MQ-88uC directly to a high level source, like for example a CD player, and adjust the level on the device.

This worked perfectly in our experiments, but in terms of sound the performance was more airy, lively and spacious when the CL-38uC played the music, which is anything but unusual. A result of tube-typical influences? The excellently low distortion values of the Luxman-Pre (c.f. measurement

results) clearly contradicts this assumption.

The Japanese company emphasizes that the MQ-88uC is designed very close to the model MQ-60. Of course in the process of „Customization, i.e. the adaptation to today's requirements and possibilities, the signal paths were shortened compared to the original. Modern metal-film high-voltage capacitors from Nichicon and other quality components offer a standard that was simply impossible 50 years ago.

Two triodes of type KT88 from JJ share the work per channel, each driven by a pair of ECC82/ECC83S from Mullard and delivering 25 watts of continuous power to four, eight or 16 ohms, for which individual taps are available on the rear of the MQ-88uC.

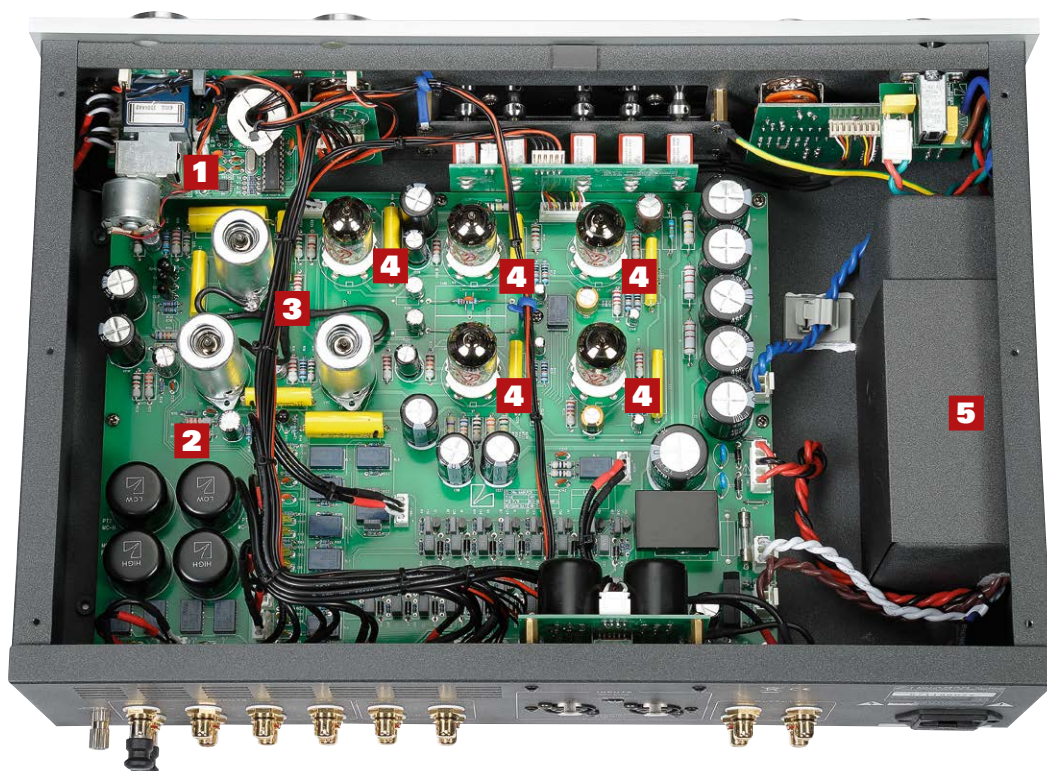
„Adapted“ Oldie

Of course, the MQ-88uC requires careful consideration when selecting a loudspeaker. Models with low efficiency and/or a nasty impedance curve should be immediately ruled out. Because they were already in position, we initially combined the tube amp with B&W's large 800D3, on which it played surprisingly relaxed. Nevertheless, they were not really a dream team, as the tubes simply aren't meant for continuously operating woofers the size of a frying pan.



NEW CABLE

Luxman launch their own cable series. We tried the made of high-purity 7N copper JPR-15000 (1.3m for 1000 Euro) between the tube duo, which is also available as an XLR-version at the same price. It performed great in terms of dynamics, even kept up with our top NFs in this respect, which was also due to the offered directness and immediacy.



The volume control in the preamplifier is done traditionally via a, here, motor-driven potentiometer

1 In the Phono-MC stage, two pairs of transformers switchable from the front panel **2** raise the currents for the following tubes **3**, which are shielded against interference. The main amplifier consists of five double triodes of type ECC82 **4**. The mains transformer **5** is encapsulated to protect against interference.

Although it is only average in sensitivity, the combination with DALI's extremely good-natured Epicon6, for example, worked much better, as it has an impedance curve constantly around five ohms. On the Dali the MQ-88uC sparked a proper audio-ophile firework in conjunction with its Retro-Pre. Our tip: try the amp's eight-ohm also on normal four-ohm speakers. This can make it sound even more opulent and sovereign – don't worry it can't harm the power amplifier.

No somewhat enlightened hi-fi fan would still believe today that tubes have to sound cosy, round and mellow anyway. However, what this combination had to offer, even in lower frequency ranges, in form of tight accuracy, was apt to overturn even most stubborn worldviews. So it let, for example, Ray Brown's bass strings in „Exactly Like You“ snap with pure passion.

Musical Top

The hearing test turned out to be an absolute pleasure. The longer we listened to Luxmans old looking but very fresh sounding duo, the more we loved it. They created a large, perfectly staggered horizon, played with punch and radiated brilliance as well as momentum in all pitches. They could decorate the musical firmament with an abundance of hi-hats

but equally precisely outline instruments and built up a vividly differentiated bass relief.

However, other amplifiers in this price range succeed in doing the same. The really impressive thing about Luxman's tube combination is its fascinating „authenticity“. Whether Lyn Stanley or Allan Taylor: voices had a „personality“ about them as well as an aura that directly appealed to the listener. They more easily got under your skin and for this reason often enough directly touched our soul – more so than some transistor rivals. This led to musical presentations with tingling conciseness, musical understanding and depth.

The midrange was delicately accentuated, while violins and cellos appeared with their characteristic dry, wooden tone, revealing a diverse palette of nuances. In spite of the pronounced transparency and broad stage, the performance of the duo showed no signs of artificial brilliance or exaggerated orientation towards the front. Quite the contrary, its performances were distinctly natural and „untechnical“. Excellent!

Plug back into something else? What for? These with competence, love and perfection developed and produced amps make not only retrophiles happy. It is wonderful that they still exist – or rather again! ■

KEYWORD

SRPP

In „Shunt Regulated Push-Pull“ mode, the tube systems (in the double triodes used here, two systems operate inside the same glass bulb) are connected in series for the DC voltage, but in parallel for the AC voltage. The anode of the first tube, which serves as voltage source, is connected to the cathode of the following tubes.

THE RETRO-DUO AND ITS FAMILY

In spite of the excellent performance of this tube preamp/amplifier: the „Luxmen“ of course also have other hot amps. We were interested to see how the double from CL-38uC/MQ-88uC would perform against the LX-380 integrated amplifier, which also comes from the Japanese retro series (left). After all, there as well four KT-88 from JJ are employed and the 1900 Euro cheaper integrated even uses Luxman's progressive „LECUA“ volume control, while in the CL-38uC a conventional potentiometer adjusts the level.

However, in older days there was, of course, no LECUA, which makes the Retro-Pre seem more authentic, while, moreover, the LX-380's could not surpass the pre-/power amp combination. It is great, no question, sounds as homogeneous as lively, but the more expensive duo sounded clearer and even more vivid in the lower registers, developed the more expansive and „real“ three-dimensionality and provided more brilliant trebles. It also

succeeded in structuring the sound images a little better. It is, thus, absolutely worth the required surcharge.

Luxman's new top integrated amplifier

LX-509X is in every respect on a whole other level from the LX-380: the 30-kilo giant effortlessly provides impulse powers of up to 270

watts with minimal distortion from the power amp's transistors. At a price of 9990 Euro it costs even one thousand more than CL-38uC and MQ-88uC together. Nevertheless, it is absolutely not obvious that owners of the tube duo would gladly exchange it for the big integrated. On the contrary!

At high volumes, the power house – unsurprisingly – had the edge. However, tube listeners are usually connoisseurs for whom mere „power“ has a subordinate role. The transistor amp always played very smoothly, neutrally and pleasantly at „normal“ – but in no way hesitant – levels, while the tube double was more focused on charm and character. It thus not only seemed more real, but also brought the music's emotional aspects closer to the listener. In this area, the LX-509X's perfectionist noblesse seemed almost distant, gave less access to the music. An accomplishment that CL-38uC/MQ-88uC, on the other hand, succeeded in with casual ease, hence emphasizing its independence.



TESTED DEVICES

Media player:

T+A MP3100HV

Turntables:

Transrotor Rondino nero with tonearms 5009 and 800-S

Cartridges:

MM: Audio-Technica VM760SLC, Clearaudio Maestro V2, Ortofon 2M Bronze

MC:

Dynavector DV-20X2L, Hana ML, Ortofon Cadenza Red

Integrated amplifiers:

Luxman LX-380/ LX-509X

Pre/power amplifiers:

Accustic Arts Tube PreampII-MK2/ AmpII-MK3, Octave HP300SE

Speakers:

B&W 800D3, DALI Epicon 6, Dynaudio Contour 20

Cables:

HMS Gran Finale Jubilee (NF/LS), In-Akustik NF/LS-2404, Luxman JP-R (NF)w

Luxman CL-38uC

Price: around 4290 €

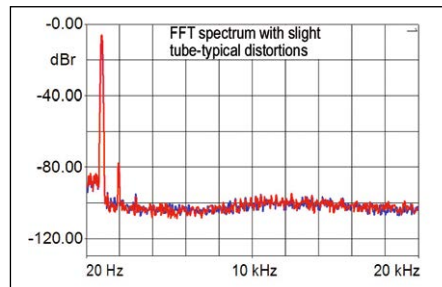
Dimensions: 44 x17 x31 cm (WxHxD)

Warranty: 2 years

Contact: Luxman Corporation
www.luxman.com

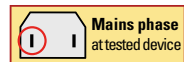
Not only due to its vintage look a picture book tube preamplifier, in which Luxman relies on traditional technology of the finest quality down to the MC-pre-transformers. First-grade sound: open, fast and of beguiling authenticity, especially in the mid-range.

Measurement results



Crosstalk Line 1 > Line 2	77 dB
Signal-to-noise ratio Phono MM (5 mV)	74 dB(A)
Signal-to-noise ratio Phono MC (0.5 mV)	72 dB(A)
Output resistance	130 Ohm
Maximum output voltage (1% THD)	22 V
Amplification factor from high level input	15.6 dB
Distortion factor at 0.03/0.3/1 V	0.03 %/0.005 %/0.007 %
Intermod. at 0.03/0.3/1 V	0.01 %/0.002 %/0.004 %
Signal-to-noise ratio at 0.3/0.03 V	86 dB(A)/66 dB(A)
Upper cut-off frequency	65 kHz
Volume control, synchronization error at -60 dB	0.2 dB
Stereo channel separation at 10kHz	66 dB
Power consumption Sby./Idle (at)	- W/28 W

Lab Comment



If we didn't know this was a tube preamplifier, it would hardly be apparent

from the measurements. Among these, extremely low distortions are coupled with high noise ratios, even in the phono-MC sector. Top!

Features

Five high level inputs, one of them in XLR; tape monitor; phono-MM/-MC input; tone control with selectable frequency edges; balance control; rumble filter; remote control

STEREO - TEST	
SOUND QUALITY PREAMP	87%
PRICE/PERFORMANCE	
★★★★☆	
EXCELLENT	

Luxman MQ-88uC

Price: around 4690 €

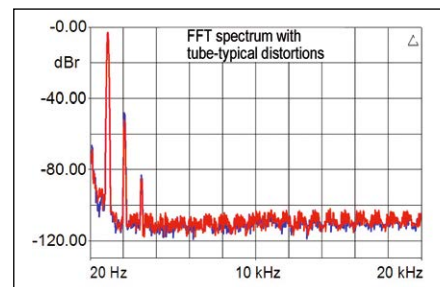
Dimensions: 44 x19 x24 cm (WxHxD)

Warranty: 2 years

Contact: Luxman Corporation
www.luxman.com

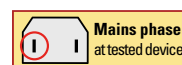
Successful adaptation of the Luxman classic from the end of the sixties with carefully adapted optics and comprehensively optimized technology in a very clean, reliable design. Amazingly tight bass range and, moreover, lively, fresh and three-dimensional sound with a light tube touch,

Measurement results



Continuous power (8 Ohm / 4 Ohm)	22.5 W/23.3 W
Impulse power 4 Ohm (1kHz)	28.4 W
THD 50mW/5W/1dB Pmax	0.02 %/0.5 %/0.8 %
Interm. 50mW/5W/1dB Pmax	0.006 %/0.13 %/0.8 %
Signal-to-noise ratio at 50mW/ 5W	65 dB/86 dB
Upper cut-off frequency (-3dB/40hm)	25 kHz
Stereo channel separation at 10kHz	68.5 dB
Power consumption Sby./Idle (at)	- W/134 W/224 Volt

Lab Comment



Sufficient power for efficient loudspeakers and everyday applications. The

distortion remains pleasingly low in the normal power range. Good channel separation, high signal-to-noise ratio. Since the output stage already reaches its maximum level at an input voltage of just under 850 millivolts, it can be fully controlled with a standard CD player using its input level control.

Features

Switchable input level control; „Direct“ input for control via preamplifier; terminals for four, eight and 16 ohm loudspeakers; measuring contacts accessible from above for adjusting the tube voltage; removable protective grille

STEREO - TEST	
SOUND QUALITY	88%
PRICE/PERFORMANCE	
★★★★☆	
EXCELLENT	



Burmester

B18 Loudspeaker

The new B18 loudspeaker is a universal sound talent: space-saving, yet at the same time extremely musical and dynamically thrilling. The high-frequency reproduction benefits from the ring radiator which is custom-made for Burmester and guarantees optimum clarity and resolution. The drivers for the mid and low frequencies complement the tweeter perfectly, resulting in an impressive sound performance.



Clear Message

Straightforwardness and professionalism without fuss have always been the hallmarks of Dynaudio loudspeakers. What about the new „Evoke“ series? We have tested the small compact as well as floorstanding models.

Matthias Böde

At a time when whoever is loudest gets the most attention, Dynaudio rarely had problems making itself and its products heard. However, instead of noise, the brand relies on intelligence and depth of development. During the more than forty years that the loudspeaker specialist has existed in Skanderborg, Denmark, most hi-fi enthusiasts will have come to realize that here it is all about what lies underneath the surface.

Which, of course, is often hidden away quite well. In fact, probably just insiders will realize that the Evokes are a new Dynaudio line. It consists of two floorstanding and two compact models as well as a center, with which the designers have succeeded to set pleasing visual accents by using the most economical means such as the screwless mounting plates of the tweeter, gently curved cover rings around the mid-bass drivers or a narrow, slightly slimmer at the rear cabinet.

Though they look rather inconspicuous, the Evoke10 and 30 – the smaller of each type – have a lot more to offer than the first impression suggests. There's only one pair of terminals on each speaker, because the Danes, as usually, refuse the bi-wiring option. I honestly appreciate this approach, because in this price range 95 percent of listeners – if not more – operate their loudspeakers with just one cable anyway. A bi-wiring terminal would then provoke losses in sound-quality due to primitive bridges and/or connection errors.

Before we took a closer look at the technical features, we wanted to gather some first sound impressions. So we positioned the freshly broken-in, somehow cute and

harmless looking Evoke10 in our listening room – and stumbled into a small sensation. Now, of course, we know that Dynaudio has been famous for outstanding compact speakers since the times of the blessed Contour 1.3 and all its relatives. However, the Evoke10 once again impressively demonstrated why that is.

To be honest, I would not have believed that the Danes could still surprise me after all these years. Most certainly not with these less than 32 centimeter high speaker in neat lifestyle-look – but that's exactly what happened. With astonishingly solid base note and foundation, the Dane projected Maria Pihl's powerful timbres in "Malvina" unwavering and expansive into our room. Uh, what is happening? You would never expect such substance from these dwarves, which are ventilated via a reflex opening on the back.

Evoke10: the audiophile Mini

Marika Cailly's "Les petits cafés", which we have heard countless times before, already showed conciseness and volume in the guitar intro as well as in the voice of the chosen Frenchwoman. Not a trace of the often associated with compact loudspeakers emphasis on the presence range. On the contrary: the Evoke10 appeared deliberately sonorous, even slightly round and rich, but nevertheless excellently transparent. Or does the impression go back to the clear trebles without any sign of artificial sparkle?

Searching for orientation we dragged over Dynaudio's more than twice as expensive and righteously highly praised Special Forty. Admitted, they played more

**The Evoke10
is a new
highlight in
Dynaudio's
strong history
of compact
speakers.**



MANY FINISHES

In addition to the variants „White High Gloss“, „Black High Gloss“ and the dark „Walnut Wood“ shown here, the Evokes are also available in the light veneer tone „Blonde Wood“ (above).

TESTED DEVICES

Turntables:

Acoustic Solid Solid
Classic Wood MPX,
Music Hall mmf-
9.3SE

CD Players:

Musical Fidelity
M3scd, Rega Apollo
CDP

Integrated

Amplifiers:

Musical Fidelity
M3si, Rega Brio,
Symphonic Line
RG14 Edition

Loudspeakers:

Dynaudio Special
Forty

Cables:

HMS Gran Finale
Jubilee, In-Akustik
LS-1603



Both Evokes have a single-wire terminal at the rear and a bass reflex port adapted to the inner volume and the cone surface.

brilliantly by nuances, shone some few more tiny details in the quietly babbling background of the live recording of "Saturday Night" played by the Red Norvo Quartet and they seemed slightly "bigger" according to their dimensions. However, the more authentic mids and more seamless homogeneity were with the Evoke10.

On the other hand they only have moderate efficiency. In order to be able to play a potent bass, the upper frequency ranges are somewhat scaled back, which results in a low average volume. The small Dynaudio therefore needs powerful amplifiers, but it never put the amps mentioned under "Tested Devices" in jeopardy. After all, you wouldn't use such small speakers for home disco, would you? And for audiophile listening – the preferred domain of two-way compact speakers – the Evoke10 is all the more suitable.

Of course, the reasons lie not least in the newly developed drivers, based on the proven top chassis of the Danes, which have been refined for decades. The "Cerotar" tweeter, for example, celebrates its premiere here, concealing refinements from Dynaudio's famous "Esotar" line behind its classic 28 millimeter dome tweeter. It features the "Hexis" inner dome, which optimizes the air flow behind the diaphragm and thus avoids

Besides the tested Evoke30 and 10 (2nd and 4th from left) there are the 50 and 20 respectively the Center 25C (around 4400, 2000 Euro/P., 1200 Euro).

resonances and distortions. Anyone who experiences the fragrant fine detailing of the Evokes in front of a pitch black, undisturbed background will gladly believe it.

The bass-midrange driver – which is doubled in the Evoke30, where the lower one works up to 1200 Hertz, the upper one, mounted close to the tweeter, up to latter's starting point of 2300 Hz – has a light, stiff and only 0.4 millimeter thick diaphragm made of magnesium silicate polymer (MSP). It is connected to the rigid glass fiber voice coil carrier via "Balance Ribs", which is intended to guarantee precise piston-shaped movements.

Evoke30: the mature

Though before I was convinced that the Evoke10 would be this duo's winner – a David with a lion's heart so to speak – I'm not so sure anymore now. The 30 not only takes over the highly audiophile character of its compact sister speaker and completes it, but also grows beyond itself. Thanks to its larger volume and the additional woofer, it not only reaches deeper down, but also achieves relevant bass volumes at significantly lower power levels, which is why its effectiveness is a good six decibels higher (c.f. measurement results).

What is more important is that the Evoke30, despite its modest size of well below one meter, reproduces the sound image at a realistic height. In the hearing test, it also developed a lavishly dimensioned horizon that was perfectly detached from the slim cabinets. The question of where the 10's bass energy came from has to be repeated in view of the full volume of the Evoke30, whose lower registers are not at all spongy, but pronounced and well contoured – and light! Yes, aside from its homogeneous, delicately accentuated midrange and its clear, unobtrusive, gentle trebles, the Dynaudio retains its airy, broad and transparent style right down to the lowest registers, resulting in a highly pleasant, non-technical and mature performance as a whole.

Sure, there are bigger and more eye-catching loudspeakers for the money, but the new Evokes will make themselves heard. And if you underestimate them because of their simple appearance, the surprise effect will convey their qualities even more clearly. ■



Dynaudio Evoke10

Price: around 1400 € (four versions available)

Dimensions: 18 x32 x27 cm (WxHxD)

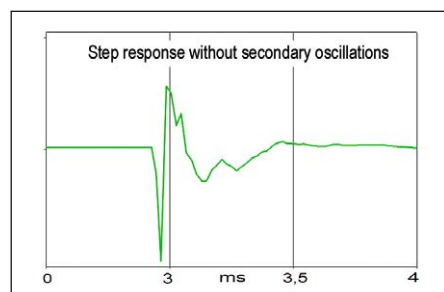
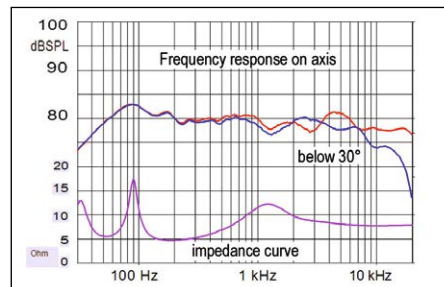
Warranty: 2 years

Contact: Dynaudio

www.dynaudio.com

An outstandingly homogeneous and harmonious sounding compact loudspeaker that lives up to its reputation and continues Dynaudio's success story in this field. With a powerful amplifier, the Evoke10 shows what is feasible in its class.

Measurement results



DC-resistance	4 Ohm
Minimum impedance	4,8 Ohm bei 180 Hz
Maximum impedance	17,5 Ohm bei 90 Hz
Sound pressure characteristic (2,83 V/m)	82 dB SPL
Power for 94 dB SPL	47 W
Lower cut-off frequency (-3dB SPL)	49 Hz
Distortions at 63/3k/10k Hz	0,3/0,3/0,1 %

Lab Comment

The frequency response is very balanced. The treble drops below 30 degrees, which is why the speaker must be angled towards the listener. Dynaudio gave its mini speaker a tiny peak around 80 Hertz, which somewhat conceals limits of the concept in lower registers. The step response is on point, which, however, isn't very surprising given the lightweight mid-bass driver. The efficiency is moderate, which is why the Evoke10 demands power at higher levels.

STEREO - TEST	
SOUND LEVEL	87%
PRICE/PERFORMANCE	
★★★★★	
OUTSTANDING	

Dynaudio Evoke30

Price: around 3200 € (four versions available)

Dimensions: 27 x92 x35 cm (WxHxD)

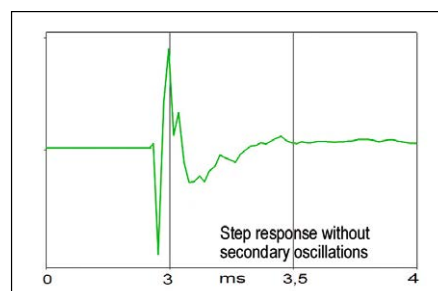
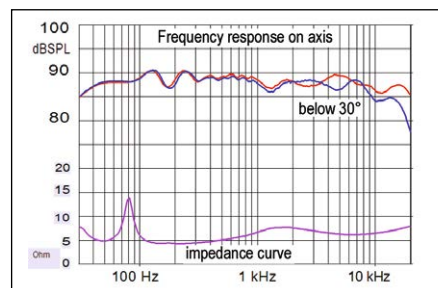
Warranty: 2 years

Contact: Dynaudio

www.dynaudio.com

The Evoke30's profound and stable bass is a lie to its modest dimensions. The wide spatial sound horizon makes it appear larger than its cabinet. Natural mids join soft, clear trebles.

Measurement results



DC-resistance	4 Ohm
Minimum impedance	4,2 Ohm bei 230 Hz
Maximum impedance	14 Ohm bei 80 Hz
Sound pressure characteristic (2,83 V/m)	88,4 dB SPL
Power for 94 dB SPL	11,6 W
Lower cut-off frequency (-3dB SPL)	42 Hz
Distortions at 63/3k/10k Hz	0,3/0,2/0,1 %

Lab Comment

Very balanced frequency response whose amplitude curve stays within the boundaries of plus/minus two decibels. Outside the axis, the trebles drop, so the Evoke30 must be angled slightly towards the listening position. The Dane's flat impedance curve – no part falls below the four-ohm mark – makes life easier for the amplifier, as does the high efficiency. Exact step response.

STEREO - TEST	
SOUND LEVEL	77%
PRICE/PERFORMANCE	
★★★★☆	
EXCELLENT	

WHAT WE'VE HEARD

Rafael Fraga:
Trova Caminhada





The naturalness and lightness of the recordings with the Portuguese singer and guitarist sets standards.

PIEGA
S W I T Z E R L A N D

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Tough Choice...



...or in this case twice the pleasure. STEREO tested the "Clearaudio Innovation Compact" with the radial tonearm "Tracer" as well as the tangentially guided "TT5".

Matthias Böde

KEYWORD

POM

Polyoxymethylene is a high-molecular-weight thermoplastic that is characterized by extreme rigidity and dimensional stability, making it particularly suitable for precision parts such as turntables.

In 99 percent of cases the matter is clear: the new turntable has a radial tone arm. It doesn't matter whether the player costs 500, 5000 or even 50,000 Euros. However, there are still a few alternative suppliers of exclusive tangential tone arms – for example the German analog specialist Clearaudio. Here, they can cost you a small fortune – but don't have to.

With a price of close to 2250 Euros, the TT5, available in black or silver, is the entry into the world of cartridge carriers, which guide the pickup in a straight line over the record instead of a circular arc. This procedure is much more complicated in practice, but it makes sense because the record matrix is also cut tangentially.

For this reason, each rotary or radial arm is somewhat of a compromise because the needle is only exactly straight to the groove at two points. In the remainder, misalignment angles occur, which cause distortions due to the needle being slightly above or below the ideal line. Thanks to the usual cranking, i.e. the inclination of the pickup to the pivot point of the arm, the misalignment angle usually remains small, while long twelve-inch arms additionally keep it in check thanks to the flatter radius. However, only tangential arms can extremely minimize the misalignment or even entirely nullify it.

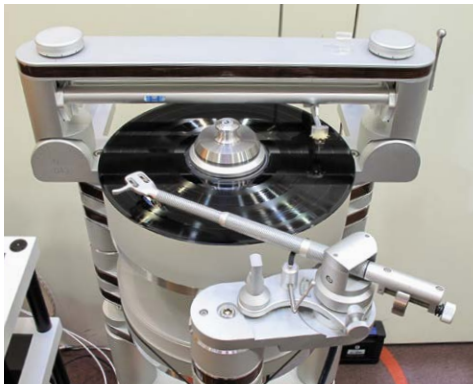
We wanted to find out how the difference manifests itself in real life, so that, for testing Clearaudio's Innovation Compact drive, which can accommodate two tonearms, we installed a TT5 in addition to the new 1900 Euros "Tracer" rotary tonearm and equipped both with identical pickups – Clearaudio's Concept MC for 750 Euros. Both are no strangers to our listening rooms, as we have already listened to the Tracer in comparison to the slightly cheaper Satisfy Kardan, while

RADIAL VERSUS TANGENTIAL AT THE "HIGHEST LEVEL"

It was during the "Süddeutsche HiFi-Tage" in Stuttgart that the Clearaudio top tonearms met in front of an audience. During a short workshop, a breast-high "Master Innovation", equipped with two tone arms, played with electronics and horn loudspeakers from Avantgarde Acoustic. The Germans from Clearaudio had brought their finest equipment, namely the radial tone arm "Universal" equipped with only the finest of materials for 4700 Euro (v.) as well as the tangential arm TT1-MI spanning the drive as a sliding bridge for a full 22,000 Euro. In order to enable them to deliver their best possible performance, both were equipped with Clearaudio's Super-MC "Goldfinger Statement". Unit price: around 12.500 Euro.

We played select titles in brilliant quality, as for example the lively "Saturday Night" by the Red Norvo Quintet or the sentimental vocal orgy "The Warmth Of The Sun" by the California Project and "Strings On Fire" – composed and directed by Henry Mancini. As expected, it

sounded superb with the "Universal" rotating arm. However, when the TT1-MI started, the space opened up further, the playback relaxed and gained serenity as well as naturalness. Clearaudio's top-arms are also based on the tangential principle. Unfortunately also at the corresponding price.



TESTED DEVICES

Turntables:

Clearaudio Ovation with Tonearm Clarify and MC-pickup Talismann V2 Gold, Transrotor Max nero with Tonearm 5009 and MC-pickup Figaro

Phono Preamps:

Brinkmann Edison, Clearaudio Basic V2

Pre/Power Amps:

Accustic Arts Tube PreampII-MK2/ Ampli-MK3

Speakers:

B&W 800D3, DALI Epi-con 6, Dynaudio Contour 20

Cables:

HMS Gran Finale Jubilee/In-Akustik 2404 (NF/LS), Jubilee/In-Akustik 2404 (NF/LS)

the TT5 was part of testing the smaller drive Innovation Basic. However now, for the first time, they compete directly.

We can hardly image a more suitable "arena" than the Innovation Compact for this match. Its thick metal outriggers, fixed by solid screws, hold the tone arms in place. The chassis, which is available in different versions and designed in double boomerang form as a trident, consists of aluminum profiles which frame a layer of high-strength armored wood on both sides. Three sturdy, height-adjustable feet support the solid construction, which offers hardly any surface for the sound to attack and should be correspondingly low in resonance.

An absolute specialty is the bearing of the 70 millimeter high and 6.5 kilogram heavy platter made of POM, which is extremely immune to resonances and is so flawlessly manufactured that it is almost impossible to

tell whether it is turning or standing. It floats on a magnetic cushion, while a smooth and well lubricated ceramic axis prevents it from slipping sideways. It is driven by a flat belt. The motor sits on one of the outriggers, together with four blue illuminated buttons for "off" as well as 33, 45 and 78 rpm.

All three speeds can be individually regulated via mini potentiometers embedded in the frame. The adherence to these speeds is guaranteed by an optical control in which illuminated markings on the underside of the platter pass by a photocell. Any deviations from the target value are gently controlled by the electronics of the "Optical Speed Control" (OSC).

The Innovation Compact, in which Clearaudio sees the "entrance to advancement", lies in the model hierarchy between the more elaborate "Innovation", with its double chassis design plus the stainless steel



The TT5 guides the pickup in a straight line over the record, i.e. in the same way as the matrix was cut. In order for it to go smoothly, everything must be aligned exactly horizontally. The included level comes in handy.

WHAT WE'VE HEARD WITH

Tokunbo: The Swan



The ex-singer of Tok Tok Tok captivates on her second solo album with catchy songs in exquisite sound quality.

Sara K. & Chris Jones: In Concert



A wonderfully lively, expressive live double LP of the former successful duo.



The 450 Euro "Swing Base" (left) allows the tangential arm to swivel. The platter of the Innovation Compact floats on a magnetic cushion and is guided by a ceramic axis. On the left, the optical speed control.

sub-platter, and the already mentioned Innovation Basic, which is equipped with a flatter, lighter platter.

To determine the exact position of the carrier plate as well as to adjust all parameters like tone arm height, horizontal alignment or the precise linearity at the left stop of the Swing Base, requires experience in handling tangential arms and therefore usually the help of a professional dealer. Because the pickup needs to be guided over the record on an exactly straight line by the little sleeve running on high-precision ball bearings made of V4 steel, which roll over a meticulously polished glass rod. Otherwise the pickup might get stuck, and the pursued nullification of misalignment is then also impossible. If, on the other hand, everything is set correctly, things go perfectly smoothly. By the way, you don't have to worry about connection at all with any of the two Clearaudio tonearms. Their first-class phono cable is permanently connected and ends in cinch plugs plus grounding on the amplifier side.

Our first discovery was that we could easily imagine an even higher quality cartridge than the Concept MC for the Innovation Compact as well as for the Tracer and

TT5. However, the Concept was absolutely sufficient. In fact, it already impressed us in previous tests with excellent sound even above price class. Further, the immaculately manufactured drive, which according to the understanding of analog insiders sets the tone for a turntable, enabled it to peak performances in conjunction with the precisely working tonearms.

Thus sophisticated sound images of high quality emerged, which captivated with shimmering liveliness, but at the same time also with structured differentiation on the broad stage as well as convincing definition down to the lowest registers. Maria Pihls as spectacular as finely woven title "Malvina" sounded almost perfectly transparent and contoured on a stage that was wide and open in every direction. The performance of all test pieces was sinewy-tight throughout and with agile and nimble timing, but also offered color and substance.

Especially in latter discipline, the Innovation "Compact" should be ahead of the decidedly light-footed, graceful and nimble "Basic". Its again bigger and heavier brother is unmatched in this area by its lighter siblings. However, we have also heard and evaluated this one with Clearaudio's large tonearm "Universal" and the superior Stradivari V2 MC cartridge.

For the Innovation Compact, we chose everything one or two sizes smaller – but without losing any of the fun. On the contrary, the setup, whether with tracer or TT5,



The Innovation Compact is also available in black and then costs 200 Euro more, i.e. just under 6150 Euro. Clearaudio's tone arms – here a "Magnify" – are also available in black

presented itself as an hi-fi – if not high-end – combination. However, it was by no means irrelevant whether we used the radial or tangential arm. Both left their very own "audio-ophile fingerprint" on the sound.

So the performance with the Tracer always seemed to be somehow more "rich" and, despite a flawless spatial presentation, also somewhat more compact than with the TT5. Latter captivated with seductive ease and almost floating lightness. "Outer Space" by Tokunbo Akinro's latest ravishing album, which – according to its title – features a wide wall of sound that, especially in the chorus, echoes in the stage's depth. Mounted on the tangential arm, the Concept MC managed to even further dissolve the spectrum and to detach it more easily from the loudspeakers. This left an even more confident and relaxed impression, but also seemed more natural than with the Tracer, which was, however, itself impressive beyond doubt.

With the full-bodied recording of a 2002 live concert from Sara K. and Chris Jones, which just appeared for the first time on LP, the radial arm showed what it could deliver in terms of groove. The TT5 shifted the emphasis in favor of stage performance and depth as well as light-footed finesse. On the whole the tangential arm kept slightly ahead, but to some degree the differences touched categories of subjective taste. In any case the choice is tough but who faces it is also guaranteed to have twice the pleasure. ■



The DC motor, controlled by three blue illuminated push buttons, drives the plate via a flat belt.

Clearaudio Innovation Compact

Price: from 8190 € (special price for complete set, drive from 5950 €, tonearm Tracer around 1900 € and cartridge Concept MC around 750 €)

Warranty: 5 years (via warranty card)

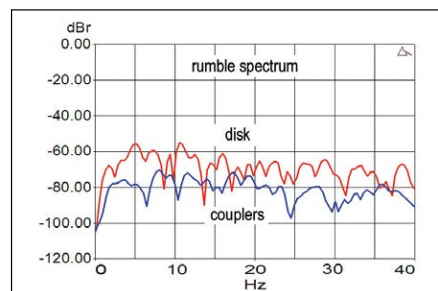
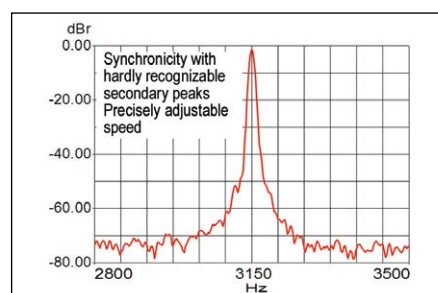
Contact: Clearaudio

Tel.: +49 9131 40300100

www.clearaudio.de

The Clearaudio has deserved the name "Innovation". It lives up to its title thanks to detailed solutions such as the magnetically mounted plate, the anti-resonance chassis and the sophisticated speed control. In terms of sound, it captivates with its distinct definition and liveliness.

Measurement results



Lab Comment

In the laboratory check, the drive shone with very low synchronicity fluctuations. The rumble disturbances were also extremely low. Especially by means of a measuring coupler, whereby the "floating" magnetic bearing of the plate has certainly had a positive effect..

Features

External plug-in power supply, three speeds including 78, fine speed adjustment, two tone arms possible, stroboscope template.



CARTRIDGE SUGGESTIONS

Clearaudio's Concept MC was tested on the Innovation Compact. However, the larger MC Talismann V2 Gold (above) fits even better to the level of the drive and tone arms, as it tones a bit more powerful, colorful and spatial. Fans of the MM faction will especially enjoy the Charisma V2, which sounds immensely relaxed, homogeneous and delicate. Both types fit the Clearaudio tonearms and cost around 1500 Euro each.



STEREO - TEST

SOUND LEVEL 95%

PRICE/PERFORMANCE



VERY GOOD



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XT1

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HIFI Eins Neu KG · Severinstr. 199 · 50676 Köln · Web: www.schoene-musik.de

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LIFE LIKE Hi-Fi-Studios MÜNCHEN · Oberföhringer Strasse 107 · 81925 München · Web: www.life-like.de





Smart Entertainer

After the melodious appetizer AM5, Canton also activated its successful Vento series. And the Smart Vento 9 has much more to offer than „just“ power amps.

Carsten Barnbeck

Basically, anyone who knows how to build passive speakers could also build an active one: take a driver, through in some power amps and you're more or less done. However, if you want your construct to also have a decent sound, it is a whole different story. Anyone who has experienced how differently a loudspeaker sounds when coupled with different amplifiers has a rough idea of how complex the relation between mechanics and electronics really is. And, in fact, this is precisely where the strength and consistency of active concepts ultimately lies: as soon as a matching setup is found, there is not much that can go wrong at a customer's home.

Contemporary „digital speakers“ with their chip-controlled brains even take it one step further. Their algorithms already separate the signals according to frequency ranges during binary processing, allowing them to control bass, midrange and treble drivers without the detour of a phase-rotating crossover. Further, developers know the limits of their drivers. The ultra-fast DSPs can intervene long before the loudspeakers exceed their limitations. Well-programmed active drivers can therefore make optimum use of their power spectrum and handle even high levels without distortion.

Canton's new Smart Vento 9 is one of those arithmetic artists, and in fact it unites all the strengths of a great active loudspeaker: it radiates pure musicality from top to bottom and plays with such phase accuracy that its stage image is given a beguiling

depth and sharpness. Also it has such immense power that its auditorium frequently feels like being struck by the incredibly strong impulses... Strike!

„Just“ bringing another active speaker onto the market would have been too boring for the engineers from the Taunus in Germany. The developers imagined a real-life living room and projected into it those protagonists who currently play an important role in consumer electronics. These no longer are



NEEDS TO BE LEARNED

An unobtrusive display in the lower third of the cabinet facilitates menu navigation. However, since it's a three-digit seven-segment display, you have to learn a lot of abbreviations.

The picture shows the mid-range control (MID) and the speaker setup (SPS). It is, however, not as bad as it sounds: after the initial setup you practically don't need the menu anymore.



Fully equipped: the connection panel of the smart Vento 9 Master – including USB

KEYWORD**Transit time**

Sound takes time to travel. The distance from the chassis to the listening position is referred to as the transit time. If both speakers are located at different distances from the seat, the image is torn apart by the different transit times.

predominantly CD players. The new partners are televisions, BD players, streamers, game consoles and smartphones.

No problem for Canton. The manufacturer has years of experience with soundbars and has plenty of electronics that can handle the new requirements. Which is exactly what makes the new Vento 9 so „smart“: in very simple terms it could be described as the largest and most hi-fi sound bar on the market!

However, let's quickly forget the term „bar“ again. The spectacular frame of the Vento 9 is formed by a large stereo floor-standing speaker based on the proven Vento pattern: three ways with ample diaphragm surface, a downfire reflex opening that ventilates the decoupled foot as well as a cabinet construction that is stiffened by every trick in the book and contains a lot of mass. Its rounded flanks minimize reflections and resonances inside. The idol was the 896.2 (see box). In this 27-kilo construction, the team around head of development Frank Göbl laced four separate Class D power amps into each of the 27-kilo constructions, which together deliver an official 600 watts – you remember that we mentioned being struck by the sheer power?

On the connection side, the Vento is more flexible than almost any other active speaker: the left speaker is designed as the master. It has Bluetooth, a USB port for

computers, an analogue stereo input as well as optical and electrical S/PDIF. The signals are transmitted to the right with perfect accuracy via a digital output.

Alternatively, the second loudspeaker can also be integrated wirelessly via high bit radio signals. Apart from USB and Bluetooth, it also has the full connection array at its disposal. If you like it traditional, you can use the individual balanced analog inputs and feed the Ventos like any other active device. By the way, the „Smarties“ are not limited to stereo operation: together with the compact Smart Vento 3 and various sound bars from the manufacturer, you can combine them into 5.1 sets. Even 3D audio including Dolby Atmos is supposed to be possible.

The electronic brain of the speakers is no less versatile. Thanks to its preamplifier, the Smart Vento can be controlled in level – even via remote control – enabling it to be powered directly from sources. For more fun with videos, Canton implemented modified versions of its soundbar sound programs. The „Movie“ mode, for example, enlarges the image by simulating surround sound and increases speech clarity during movie playback. This emphasis is even stronger in „Voice“ mode, which raises dialogues by a few decibels. If you have ever unsuccessfully tried to follow the dialogue of a movie without waking half the neighborhood, you will love this feature!

If it is not possible to place the speakers symmetrically in the room, the setup allows the compensation of level differences and **transit time**. Of course, the Ventos also sounds best in a stereo triangle, however „smart“ also means that the speaker has the necessary degree of willingness to compromise. This includes a flexible and properly designed sound control system that integrates not only treble and bass, but also midrange. As the included remote control has direct access to important sound parameters you won't have to search through the depths of the menus every time. Further, you can save up to three presets that recall entire parameter sets

IDENTICAL TWINS?

A part from its terminal and display, the cabinet of the Smart Vento 9 is identical to the Vento 896.2. The driver configuration is also the same: basses and mids are based on titanium diaphragms, while the tweeter is made of ceramic. However, sound comparisons between the siblings are tricky. They have the same dynamic, powerful character and velvety fine, never annoying tweeter. However, we were unable to find an amplifier that would allow a well-founded A/B comparison with the integrated power plants of the smart Vento. Although the passive is more flexible, as you can fine-tune its sound via the amplifier, none of our test amps reached the bass control and performance of the smart Class D power amps.





The handy remote provides direct access to important sound parameters.

at the touch of a button.

Since we focus on music playback, the Vento was usually running in linear stereo mode. The first thing we noticed there was the huge stage image. Similar to the incredibly musical heavyweight Reference 8K, the spherical Smart-Box didn't seem to care at all for the physical limitations of our listening room. Of course, the positioning of the speakers as well as their angle play a role here as well, but orientation towards the listening position in particular did not seem to have a great effect on their plastic depiction.

Much more important was the distance to the wall. The Vento has a voluminous and powerful character and it – correspondingly – demands a certain distance: 70 centimeters at least. It thanks this space with earth-shattering impulses, which are always completely under control. We found a fascinating example in Leonard Cohen's „You Want It Darker“, which combines a grumpy electric bass with Hammond organs, floating choirs and an electronic bass drum that sounded unbelievably punchy and appealing over the Vento, but didn't have the slightest hint of unwanted resonance. „Number 9“ blows bass impulses into the listening room with perfect dryness. Cohen's vocals remain completely unimpressed, standing unshakable and with fantastic presence between the speakers. You'd have to be properly cold-blooded in order to not immediately cheer up in view of this smart entertainer's performance! ■

Canton Smart Vento 9

Price: around 4400 €

Dimensions: 29 x11 x40 cm (WxHxD)

Warranty: 2 years

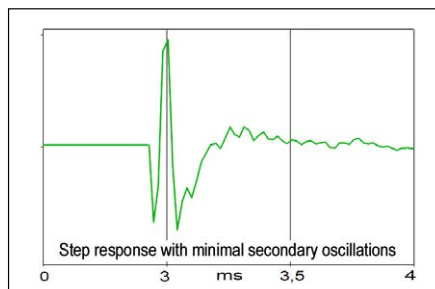
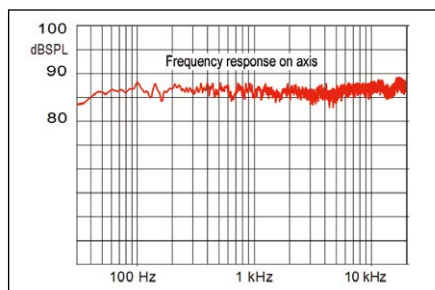
Contact: Canton

Tel.: +49 6083 28730

www.canton.de

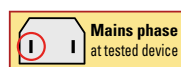
Canton is continuing on the digital path and adds many intelligent features to its Smart series. The active Vento 9 has an incredibly powerful and present character as standard on board.

Messergebnisse



Lower cut-off frequency (-3dB SPL)	28 Hz
Distortion factor at 63/3k/10k Hz	0,3/0,2/0,1 %
Power consumption Sby/idle (at)	/14 W

Lab Comment



Linear frequency response and high level reserves. Since the Vento's DSP causes latency, we had to measure noise signals to compensate for room influences.

Features

Per speaker: 1 analog mono in (XLR), 1 analog mono in (XLR), stereo-in (Cinch), 2 x S/PDIF (optical, electrical), S/PDIF-out; Only on the master: bluetooth, USB audio for signals up to 24/192; speaker-setup, various sound modes, three-band EQ, remote control

STEREO-TEST	
SOUND LEVEL	81%
PRICE/PERFORMANCE	
★★★★★	
OUTSTANDING	



EXPANDABLE

Canton is adding the „Smart Connect 5.1“ (c.f. picture. €500) to its new active range, which includes multiroom, high bit radio, 3D audio and 4K-HDMI. The larger model „Smart Amp 5.1“ (around €700) also offers amplifiers for the integration of passive speakers.

TEST DEVICES

Sources:

Auralic Altair, Blue-sound Node2, Rega Apollo CDP, T+A MP1000E

Integrated amplifiers:

Symphonic Line RG14 Edition, T+A PA1000E, NAD M32

Speakers: B&W 702 S2, Canton Vento 896.2

Cables: NF cable sets from Audioquest and van den Hul



Das ändert alles!

D/A CONVERTER 1611 F

OPTIONAL WITH MBL ROON MODULE





Munich – very British

Not even the alphorn players could hide the fact that the High End has been becoming more and more international – English is now the language of choice.

The price is in Sterling. I don't know the price in Euros. "This is how we journalists were often answered when we asked about prices of novelties at the High End. It is increasingly not the German distributors who operate stands, but the manufacturers themselves. Two thirds of the exhibitors now come from outside Germany, from 42 countries – above all from the USA and Great Britain. Altogether, the organizers accommodated almost four percent more exhibitors in the halls and atriums of the MOC, which is now filled to the brim.

The number of visitors from the trade increased by a good eight percent, three quarters of which came from

outside Germany, with Great Britain at the top here as well. The international share amongst the „normal“ visitors may not have been quite as high, but they also came in large quantities: a total of more than 21,000 people visited the High End 2019, an increase of 6.5 percent compared to the previous year. Most of them showed up on Friday. A big success for the organizers – not least due to the rainy weather.

Among the highlights of this High End were the presence of brand ambassador Steven Wilson, who not only signed countless autographs, but also gave an interesting insight into his credo as a music producer: he doesn't let any mastering engineer fiddle with his mix. „I bypass mastering completely“, he revealed in finest Oxford English.

The next High End will take place from 14 to 17 May 2020. However, first we have selected some of the most interesting innovations of the High End 2019 for you.



Vincent SV 737

The German engineers have once again struck a blow and developed a stunning hybrid integrated amplifier, which should nevertheless cost no more than 3000 Euros – including DAC, Bluetooth and WiFi!



Octave Jubilee 300B

The brand new Octave power amplifier was a technical sensation and an absolute highlight. Price? Better don't ask...



Bugatti Chiron Sport

Accuton developed the entire loudspeaker equipment for the 3.2 million Euro costing 1500 hp supercar – it became standard equipment.

OPINION: MICHAEL LANG



This year the High End leaves me – again – with an ambivalent impression. Fortunately, in more rooms than in the recent past one could properly listen to good music – sometimes even with systems in moderate price ranges. On the other hand, there were again systems in the upper six-figure range whose performance impressed me more visually than acoustically. There, „impressive“ is a double-edged sword, as it mostly meant an extensive collection of devices and accessories, crowned by loudspeakers, which burst the frame that could possibly be realized in any inhabitable home. They attract attention at all costs – preferably in dim light to prevent recognition of all their unfinished details.

And yes, we are aware of the fact that we ourselves from the writing profession are not entirely innocent of this development. After all, we are only too happy to offer these attractions the attention they crave for by photographing, describing and testing them.

However, these exhibitors are probably not even surprised anymore by mocking comments of down-to-earth observers and visitors.



Thorens TD124 DD

A sensation of this show: more than 50 years „later“ there is once more a TD 124 – with modern direct drive! The price will be just around the five digit-mark.



Naim Mu-so: new generation

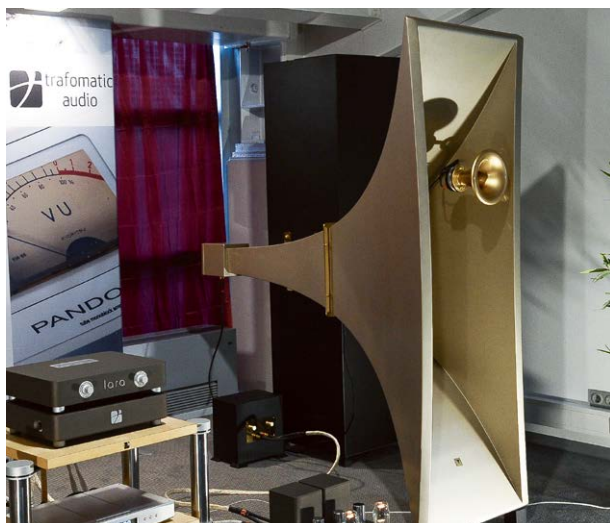
With its more powerful processor, new chassis from Focal, new colours, Chromecast, HDMI-ARC, Airplay2 and Roon, the new Mu-so is prepared for the future.

OPINION: MATTHIAS BÖDE

Under the new leadership of the High End Society, which organises the Munich trade fair, the show has once again increased its wealth of ideas and diversity. Congratulations to the organizer, who makes sure that every visitor gets his money's worth. Whoever doesn't find anything of interest here and isn't infected by the high-end „virus“ is themselves to blame. And as far as the high prices of some – but by no means all – exhibits are concerned: I can hardly walk the streets today without seeing a car for 100,000 euros or more every other minute. Without wanting to propagate excess: HiFi at the limit, produced in small series, also has its place in the exclusive sector.

**Gauder DARC 40**

The latest addition to Gauder's successful DARC series is available complete with ceramic chassis or also with a diamond tweeter. Price: from 16,000 Euro.

**Tune Audio Avaton**

If you've got a lot of space, a bunch of money and some strong friends, this extravagant horn system could be interesting. Hearing distance: at least four meters.

**Audionet Humboldt**

The Humboldt integrated amplifier owes its appearance to the renowned industrial designer Hartmut Esslinger. The Berliner completes Audionet's Ultimate series and is expected to cost around 42,000 euros.

**WBT Physical Vapour Deposition**

From now on, WBT is coating the contacts of its „Next-gen“ series with gold atoms using the PVD plasma process, which is intended to ensure a particularly homogeneous structure.

**Lumin AMP**

The streaming expert Lumin from Hong Kong brings its own amplifier. The „AMP“ delivers 160 Watt into 8 Ohm from its Class A/B circuit and can be used in stereo or bridged as mono.



Lexicon SL-1

Equipped with twelve tweeters, 16 mid-range and four woofers in 360-degree arrangement each and distributing over 23 channels, the SL-1 makes the sweet spot superfluous. Price: 43,000 Euro.



Piega MLS3

A stroke of genius from the Swiss manufacturer – the patented coax ribbon works open as a dipole in line-source arrangement, but is less sensitive to positioning due to the lamellas. Price: above 30,000 Euro.



Dynaudio Recording Studio

In the outdoor area of the High End, Dynaudio showed how music is created live in a professional mobile studio with talented newcomers.



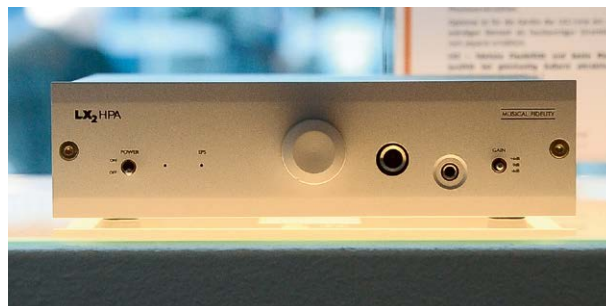
AMG Viella Forte

The Franconian manufactory brought the sound of the globally acclaimed „Viella“ to an even higher level. Price: around 23.000 Euro.

OPINION: VOLKER PIGORS



Nowadays, the HighEnd is essentially a business fair. English was omnipresent. This shows the importance of the HighEnd as the most relevant hi-fi trade fair on the globe, which is of course also great for audiophiles, because the international elite of manufacturers gathered there. The demonstrations are getting better and better, people know and optimize the rooms in the MOC, the systems are often adjusted absolutely on point. Digital features are spreading, whether it is in form of system expansion by manufacturers or the multifunctionality of individual devices. B&W even surprised with a mature multiroom system. The analog trend also proved its relevance with a large range of products: the Garrard 301 has risen again, Thorens offered a remake of the legendary TD124 as well as an open reel tape machine (!), which is already sold out for 2019. Whether digital or analog, HiFi stays exciting – and we will report.



Musical Fidelity LX HPA

A genuine headphone amplifier in compact format, with enough quality and power for almost any headphone – everything for 300 Euro.

OPINION: TOM FRANTZEN

The general mood was good, and the sound quality of the demonstrations has – thankfully – increased this year. Striking was the peaceful coexistence of streaming, CD, record and tape as sources. What worries me personally is the exploding price level with a certain neglect of the „middle ground“, which may foster the lack of young audiophiles. To phrase it with an edge: nobody streams from Bluetooth on mobile phones to a 700,000 euro system. Otherwise, the fair was fascinating and colourful. However I would like to tell some home cinema demonstrations that just „boom“ doesn't do the job – music „helps“ dramatically.

**Wharfedale** Linton and Elysian

The vintage Linton costs around 1000 Euros, while the Elysian series, built with Scan Speak drivers in England, represents the new flagships.

**Brinkmann** Voltaire ISS

In addition to the Taurus direct drive turntable, Brinkmann presented this splendid integrated amplifier, which has an output of 2 x 250 watts and can be equipped with DAC/streaming or a phono module.

**Wilson Audio** Sasha DAW

After the death of his father David Wilson, Daryl Wilson presented the American's newest jewel. As usual, the sound was a highlight of the fair.

**Einstein** The Music Machine

Under this promising name, Einstein Audio presented a new integrated amplifier with rather unusual design. It is expected to cost around 4000 Euro. 70 watts per channel at eight ohms are indicated as power. The mirror-symmetric design has an electronically fully balanced circuit.



Transrotor

Gerd Weichler presented the compact drive unit with three motors for a still unnamed Transrotor newcomer. It could cost around 6500 Euros.



AVM Audition AM 6.3

Electronics specialist AVM from Malsch – here CEO Udo Besser – becomes a high-end „full-range supplier“ with its active loudspeakers for around 20,000 euros.

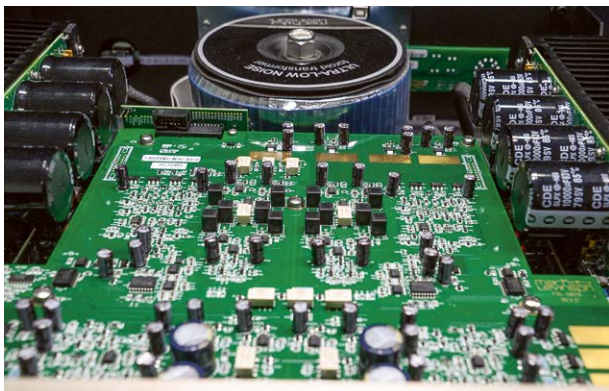
WIRELESS
room sound.
FULLY
connected.

The new Canton **Smart series**: Perfected audio quality for your connected home. Explore the powerful streaming world of Canton and connect the Smart products wirelessly in any combination to create an impressive sound stage.



More information is available from your specialist Canton retailer and in our online shop at www.canton.de

CANTON
German loudspeaker tradition



Mark Levinson 5802 & 5805

Two new integrated amplifiers, the former with digital inputs only, the latter also with analog inputs incl. Phono-MM/MC. Prices: 8000 and 9000 Euro.



T+A HV in Titanium

T+A presented their brand new high end system of CD/SACD drive PDT 3100HV and HD-streaming-DAC SDV 3100HV. Junior boss Conradin Amft also showed us the titanium versions of the devices.



Voxativ Absolut Hagen

The Berlin-based noble manufacturer, specialized in broadband systems, surprised with a very mature sounding system for less than 8000 Euro.



PMC Kind of Blue

Beside new loudspeakers of the British noble brand PMC an impressive Dolby Atmos presentation of legendary Miles Davis albums was presented. Maurice Patist, David Rideau and Steve Genewick were the driving forces behind it. Miles' nephew Vince Wilbourne and son Erin Davis accompanied the project.



Hegel H 390

The beautiful Norwegian integrated amplifier provides 2 x 250 watts. Price: approx. 6000 Euro, available from autumn.



Cocktail Audio HA 500 H

DAC with tubes: the display shows the level on virtual VU meters. Now available for 2200 Euro.



IN ADMIRATION OF MUSIC

**“The way we listen to music has been transformed.
But the reason we listen remains the same”**



At DALI, we believe that digital music should deliver convenience and choices without compromise on sound quality. That's why we've re-imagined hi-fi for the 21st century with the CALLISTO Wireless Speaker System.

Stream, beam, and control music from almost any source and enjoy the stunningly detailed, transparent reproduction DALI is celebrated for.

Smart Spender's Darling



Many believe that prices are skyrocketing wherever you look. However, not so at Musical Fidelity, who are fighting against this allegation even after the sale to Pro-Ject owner Heinz Lichtenegger.

Michael Lang

The shift of generations is completed: company founder Antony Michaelson handed over the baton at the last High End in Munich and sold his company to the Austrian Heinz Lichtenegger, who is known as the owner of Pro-Ject. Lichtenegger has a very similar philosophy to the Englishman Michaelson: to give as many people as possible access to good, high-quality reproduction by creating affordable products. However, that is only viable with efficient production and correspondingly high quantities. It

is, therefore, only reasonable that production is carried out in the Far East but under European quality standards. The very solid case with a five millimeter thick aluminum front panel demonstrates the thoroughness of Musical Fidelity's production. The amplifier's volume is controlled via a comfortably firm knob of perfect size and shape – a feature that we have repeatedly looked for in vain even with much more expensive amplifiers. The buttons for on/off and input selection are equally made of metal and react

precisely to light pressure. In addition to six high level inputs, one of which is switchable for home cinema operation, there are a pair of sturdy speaker-terminals that also accept banana plugs as well as a preamplifier output for connecting an additional power amplifier on the rear. The amp is therefore prepared for so-called “bi-amping”, i.e. the operation of a loudspeaker with two, preferably identical, power amplifiers.

However, on the other hand there are no connectors for headphones or turntables. For these applications Musical Fidelity offers separate inexpensive high-quality solutions. It is noteworthy that the M2si relies on a traditional voltage supply with powerful electrolytic capacitors and a toroidal transformer underneath its hood. The preamplifier section works in Class A and is clearly segregated. Musical speaks quite confident of a pre/power-amplifier combination dressed as an integrated amplifier in which the technology from larger series is skillfully applied in a slimmed down form. We noticed a very low damping factor in the laboratory which indicates a discreet negative feedback loop – a circuit detail, which is associated between music lovers with a particularly lively and swinging sound image, but which, in reverse, almost always increases sensitivity for speaker selection. Otherwise, the about nine kilo heavy amplifier made an excellent impression in the measurement laboratory.

The simultaneously tested M2scd CD player features just very few controls on the tidy front panel, exactly like its amplifying counterpart.

It is adorned with a bright blue and clearly readable display that even shows the title at the beginning of each track. Instead of a drawer, here the disc disappears into a slot, as in your standard car CD player. The reading time of nine seconds is not what we would call “brisk”, but it is still superior to any SACD player. In comparison to the old CD3 player, which we tested a few years back, the now direct title selection enables immediate playback of specific titles. The detour via the “Play” button is – thankfully – a thing of the past. Anyone hoping for DAC functions to polish other digital sources should have another look at the price tag and realize that budget for features is limited. However, one digital output each in cinch and optical make it possible to connect an external converter. Looking at the measured figures, it was obvious that the English know how to build a proper output stage at a reasonable price: with an output resistance of just around 50 Ohm not even longer cables between player and amplifier should have a significant effect on signal quality. The converter is of the 24-bit type and exclusively takes care of PCM signals. It stood out with its consistently good measurements. For the sake of completeness it should be mentioned that the



MANY BUTTONS; EASY TO USE

The remote control operates amp as well as CD player, fits comfortably in the hand and works even at greater distances.



Musicality has priority over detail here

The “Musicals” are distinguished by their proper features, including digital outputs on the CD player and pre-out on the amplifier, as well as by the quality of their workmanship.

The amplifier would have had room for more, but is distinguished by its clean design.

TESTED DEVICES

CD player:

Musical Fidelity M3cds

Integrated amplifier:

Musical Fidelity M3si

Loudspeaker:

Live Act Audio 108;
PMC 5.22

Cable:

Audioquest,
Cardas, Lua

frequency response showed a deviation of maximum 1.2 dB from the ideal around and above two kilohertz – not perfect, but neither alarming. In the M2scd, too, the power supply is provided by a toroidal transformer, while the individual functional units are connected to each other service-friendly via plug connectors. They are spatially very clearly separated inside the generously dimensioned enclosure. The drive noise is very low. Obviously, money was saved only at the right places.

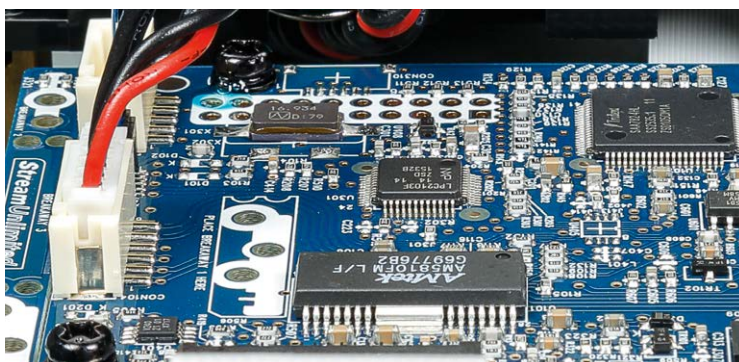
In order to do justice to this achievement we were also very generous with our listening test and took a lot of time to hear the two devices individually, in connection and in comparison with other components.

To start off we tried it with the Beatles. After all, a cloudy and rainy winters day is much easier to endure with some positive music. We were surprised how uncompressed and sovereign the amplifier worked on the big Live Act 108 loudspeakers, even at levels close to the limit of reason – which we exceeded several times to drive the bad mood out of the listening room. And in fact, after we had properly appreciated "Here Comes The Sun", the mood indeed brightened up. Even more, the sky changed immediately from unpleasant grey to light blue!

The next stop was Grace Jones' "Slave To The Rhythm", which is as old as it is



timeless – in fact a characteristic it shares not only with the Beatles, but ultimately with most great music. The mysterious lady was certainly not an outstanding singer, but her albums are without exception well produced. This shone through even with the small Musical Fidelity combination, which did not have to hide itself even in comparison to the „3“ combi, which costs you 1300 Euros per device. Yes, here and there the little duo was a bit „sloppier“ in the finest details, especially at higher levels or when the loudspeaker was not as easy as the big 108 live act from Southern Germany. What the newcomers really had on their plate was to convey life, energy and joy. An example from classical music should make it clear: Pepe Romero, classical guitarist, recorded the Concierto de Aranjuez with the Academy of St Martin in the Fields under Neville Marriner. I recommend the Musical Fidelity duo to anyone who couldn't yet find their passion for classical music. I'm pretty sure that – with proper loudspeakers – this system will open the door to classical music, because it is able to combine tonal qualities with a sound that tends minimally towards warmth as well as with excellent detail and dynamic qualities. As expected, this is still a long way from perfection, but it conveys all the essentials to enjoy music. ■



The density of integration in the CD player is not unusual, but still impressive.

Musical Fidelity M2scd

Price: around 800 €

(available in silver and black)

Dimensions: 44 x10 x38 cm (WxHxD)

Warranty: 2 years

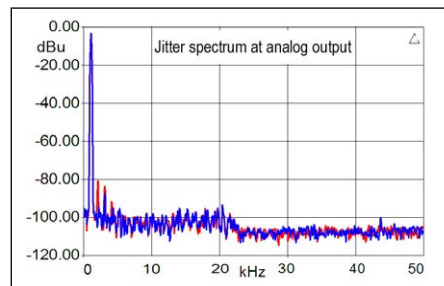
Contact: Musical Fidelity

Tel: +43 1 544 858 0400

www.musicalfidelity.com

Simply equipped CD player with slot-in drive. Easy to use, powerful and dynamic with slightly warm sound characteristics. Cleanly finished.

Measurement results



Signal-to-noise ratio digital zero	112.4 dB
Quantization noise ratio 0 dBFS	96.3 dB
Converter linearity at -90 dB	0.2 dB
Output resistance Cinch	47 Ohm
Output voltage Cinch 0 dBFS	2 V
Distortion factor at -60dBFS	0.4
Rectangle	ok
Pulse	ok
Reading time	9 s
Emphasis recognition (CD)	ok
Disturbances of the information track	0.9 mm
Surface defects	0.9 mm
Power consumption Sby/idle (at)	/7.3 W

Lab Comment



The lab test was largely inconspicuous sometimes even very good; only the frequency response has a dent of about 1.5 dB between two and ten kilohertz – not ideal, but forgivable.

Features

Economical features: slot-in drive; title jump, direct title selection; remote control with numeric keypad, cinch outputs; one optical Toslink and one coaxial S/PDIF digital output each

STEREO -TEST	
SOUND QUALITY CD	61%
PRICE/PERFORMANCE	
★★★★☆	
EXCELLENT	

Musical Fidelity M2si

Price: around 800 €

(available in silver and black)

Dimensions: 44 x10 x40 cm (WxHxD)

Warranty: 2 years

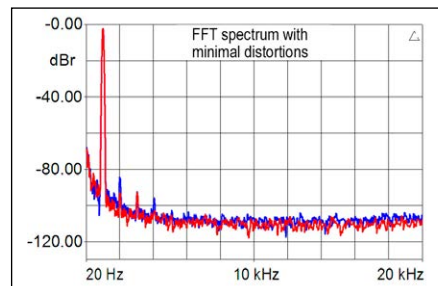
Contact: Musical Fidelity

Tel: +43 1 544 858 0400

www.musicalfidelity.com

A powerful but also musically convincing amplifier with a slight tendency towards the warm. Little, but meaningful features and clean workmanship make it a „best buy“.

Measurement results



Continuous power (8 Ohm / 4 Ohm)	68.7 W/90.4 W
Pulse power 4 Ohm (1kHz)	110.5 W
THD 50mW/5W/1dB Pmax	0.02 %/0.007 %/0.01 %
Intern. 50mW/5W/1dB Pmax	0.004 %/0.02 %/0.3 %
Signal-to-noise ratio at 50mW/ 5W	69.4 dB/90.3 dB
Attenuation at 4 Ohm (63Hz/1kHz/14kHz)	14/17/17
Upper cut-off frequency (-3dB/4Ohm)	>80 kHz
Crosstalk Line 1 > Line 2	73.2 dB
Volume synchronization error at -60dB	0.02 dB
Power consumption Sby/idle (at)	<2 W/17.4 W

Lab Comment



No abnormalities in the laboratory, only a moderate damping factor. The channel equality is excellent, as is the crosstalk attenuation. A decent power reserve.

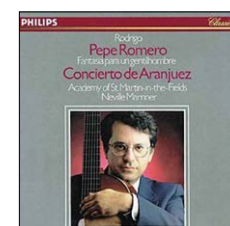
Features

Six cinch inputs, one of which can be converted to a home cinema option; pre-amplifier output, tape output; remote control; classic power supply with lavish toroidal transformer

STEREO -TEST	
SOUND QUALITY	63%
PRICE/PERFORMANCE	
★★★★★	
OUTSTANDING	

The M2scd and si really convey musicality and fidelity

WHAT WE'VE HEARD WITH



Rodrigo: Concierto de Aranjuez
Guitar and orchestra in perfect harmony. Also soundwise a highlight.



Boost to higher grounds

No other brand better represents the sophisticated turntable at an affordable price than Thorens. The new owner wants to continue the great tradition with the brand new TD202. STEREO tested whether it is suitable to become the next customer's favourite.

Matthias Böde

If anyone has ever built a popular audiophile turntable, it is Thorens with the purist, timeless and indeed indestructible TD166 and 146 models the latter offering at least the minimal comfort of automatic switch-off. Tens of thousands of these classical turntables conquered the facilities of their ageless clientele from the mid-1970s to the end of the 1990s in various versions. From pupils to grandparents, everyone loved them.

In the event of a similar success of the modern successor TD202, the new Thorens owner is likely to beam with joy. Gunter Kürten, who served for many years as managing director of Denon and lately directed ELAC's business between 2015 and 2017, where he initiated their current record player line-up, possesses the HiFi gene – and owns Thorens since 2018. Of course, there is a whole range of the brand's tried and tested

turntables. The first new device is now the TD202, which is considered a benchmark for the seriousness of the new Thorens owner.

The Phono-Pre is great

The immaculately shimmering aluminum plate with rubber mat, reminds of days gone by and has a rubber ring inside for dampening. Fans of the sound of old Thorens will certainly also remember the ringing of their plates, which stopped after a slight flick. The TD202 didn't inherit this bad habit.

For a tonearm they used a straight type with removable headshell, dampened lift and **anti-skating** adjustment via a spring mechanism. Since experience has shown that customers of this class do not (yet) want to worry about a fitting pickup, Thorens has precisely pre-adjusted Audio-Technica's AT-95E MM. After all, it has proven its worth millions of times without exaggeration. Balancing the tonearm by means of a counterweight and adjusting the required 18 millinewton tracking force after zeroing the scale is a breeze. And off you go.

The TD202 already has the phono-pre-amplifier on board, so it doesn't even need a phono input on the amplifier. To activate, the small switch labeled „Pre Amp“ in the connection terminal must be set to „On“. Then the new Thorens can be connected like a CD player. Very convenient, since many modern amps, especially those from the A/V sector, lack the phono branch. The TD202 plays on them without any further measures. If a phono input is present, it is

»WE WILL PRESERVE THE THORENS-DNA.«

STEREO: *Taking over a traditional brand like Thorens is a big responsibility, isn't it?*

Gunter Kürten: Absolutely, and we want to live up to it. Anyone who feared that we would use the big name to bring average-turntables to the people will be pleasantly disappointed. Last year at the High End trade fair, we already showed the prototype of the fully automatic TD148A (photo), whose plate and arm are mounted on rubber and

which is based on the former Thorens models.

Will there also be new sub-chassis models for which the Thorens brand stands?

Definitely, because we want to maintain the distinctive Thorens DNA and revive it where it was lost. In doing so, we will orient ourselves in every respect to the Thorens classics, but at the same time, as with the TD202, we will consider modern approaches and requirements. Take a look at what BMW has done with the Mini. This is a role model for me.

How big do you estimate the risk of nowadays relying on a technology that is already antiquated, such as the record player?

I don't worry about that at all. Records are always listened to – and that requires good equipment from a reliable source.



easy to try out which way the sound is of higher quality.

Though we had suspected the TD202's Phono-Pre to be, at best, a makeshift, we were proven wrong by its pleasing, because



In addition to the support, an internal rubber ring should also effectively dampen vibrations and the „ringing“ of the plate – with success.



The cranked headshell is removable, which simplifies the installation of another pickup. A nut fixes it to the straight tonearm.

KEYWORD

Anti-Skating

On the rotating record, the tonearm is pulled inwards due to its cranking, which is called skating. Anti-skating counteracts this force.

HISTORY OF HIGHLIGHTS

The TD150 set the early optical and technical standard for the Thorens turntable-line.

TESTED DEVICES

Turntables:

Pro-Ject RPM3
Carbon, TEAC N-550,
Thorens TD209/TD207

Integrated

Amplifiers:

Denon PMA-1600 NE,
Symphonic Line RG14
Edition

Speakers:

B&W 603, Dynaudio
Special Forty

Cabels:

Pro-Ject Connect it
Phono E, Silent Wire
NF5 Phono

The eventful history of Thorens dates back to 1883, when Hermann Thorens founded the company in Sainte-Croix, Switzerland. Initially, the company was dedicated to the production of boxes and works for musical clocks. In 1903, the first roller phonograph, based on Edison's model, followed; shortly thereafter, Thorens entered the world of funnel gramophones, of which more than three million were produced. In 1928, the first direct drive for gramophones was developed, while much later the manufacturer consistently favoured the belt drive for its turntables – historical irony. In 1930, the company employed around 1200 people, and during the war it also manufactured record cutting machines and sound systems for cinemas, followed by a razor with spring drive and radios with remote control.

The modern era did not begin until 1957 with the TD124 studio drive, which kept its 4.5-kg zinc die-cast plate running very smoothly with a combined belt/friction wheel drive. The 124 later came with a high-quality SME arm (r.o.) and became a legend. Various other models followed and in 1965 finally the turntable, which probably everyone halfway versed in this field recognizes at first sight as Thorens and which introduced the spring-loaded subchassis for plate and tonearm at three points to dampen vibrations: the TD150 with its characteristic rubber mat and tonearm TP13.

From then on, analog insiders will know it best. Milestones on the way were, of course, the first TD126 Electronic (1974), whose MKIII version became a customer's favourite; the affordable line of TD105, 110 and 115, also widely used since 1978, as well as the ultimate uncompromising, high-priced „Reference“ one year later, which was followed by the „Prestige“ for the 100th birthday in 1983. The double TD146/166, introduced in the mid-seventies, was yet another source of vinyl enthusiasm. And special designs such as the extra-wide TD520 for twelve-inch tonearms meant that Thorens always remained at the focus of fans.



Thorens TD124



Thorens TD150



Thorens TD520



Thorens TD146



The signals are fed analogous from a pair of RCA sockets and digitally (16-bit/44.1 kilohertz) from a USB interface. When using an external one, the integrated Phono-Pre can be switched off.

color-homogeneous, cleanly differentiated as well as lively presentation. Even on expensive amplifiers equipped with phono we would have often preferred it, although the stage always seemed a little more compact and more oriented towards the front. On the other hand, the integrated preamplifier impressed with tonal coherence. Thus it emancipated itself in our opinion: from a supposed makeshift solution to a secret trump in the new Thorens' sleeve.

Who wants to digitally feed their records to a computer via the integrated USB interface, with the data format corresponding to the CD standard of 16 bit/44.1 kilohertz, needs the work of the internal phono amp anyway.

Apart from the easy adjustment of the tracking force described above, only the flat belt lying on the inner rim of the plate has to be placed on the motor pulley during assembly. That is done through an opening in the plate sport and requires a little finesse.

Dry, clear bass

In the listening room, the idea of the TD202 as a new, universally usable "turntable for the people" soon came to the fore again, because the TD202 – whether with its own or external phono part – put in a lot of effort. Wolfgang Bernreuther's multi-layered and detailed „For Ole“ was conscientiously unraveled, while depicting voice and instruments at the intended positions within the sound stage and without forgetting to give the successful performance a shot of emotions without which this title simply does not „work“.

It was astonishing how dry and clear the Thorens represented lower frequencies. Even in a mixture of vehemently plucking bass impulses and dragging bass clouds from Carolin Nos „Still Waters Run Deep“ the TD202 kept the reins tight and didn't smear which was great for transparency.

The newcomer could not quite match the proven TD209 for 1000 Euro, which played even airier and more relaxed. However, in our cross check it rather kept up with the nearly 700 Euro expensive TD207. A great achievement, especially as these two offer neither Phono-Pre nor USB. The new TD202 rightly bears the name Thorens and is a real tip in the ambitious entry-level class of turntables. ■

Thorens TD202

Price: around 600 € (including MM pickup, phono preamplifier and USB interface)

Dimensions: 42 x 13 x 34 cm (WxHxD)

Warranty: 2 years

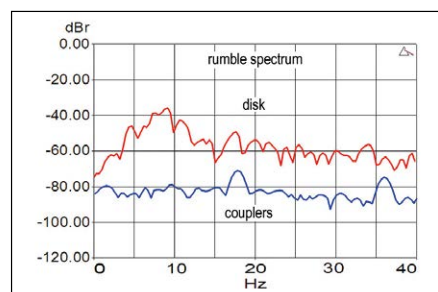
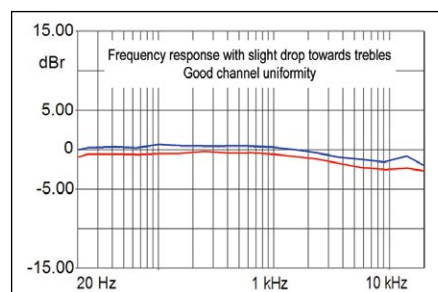
Kontakt: Thorens

Tel.: +49 22048677720

www.thorens.com

A strong sign of Thorens with new leadership. The TD202 is a well-designed turntable equipped with good ingredients, which also has a first-class phono preamplifier and A/D converter for the USB output on board. Balanced, lively and relaxed sound, especially via the phono amp. A recommendation not only for beginners!

Measurement results



Output voltage (scanner only): 4,5 mV

Tracking force: 18 mN

Lab Comment

The small Thorens is characterized by a well-balanced frequency response with only a slight high-frequency attenuation, good synchronization values (not shown) and low rumble. The output voltage refers to operation without the phono preamplifier.

Features

External power supply, MM-pickup, integrated, switchable phono preamplifier, USB interface for digital recordings from turntable to PC/Mac, removable headshell, dust cover



MAINS PHASE

The TD202 sounds optimally resolved and homogeneously only when the power supply is inserted in the correct phase. For orientation we have marked the preferred side with a red dot.



CAREFULLY

Using the STEREO test and adjustment template, we checked the cartridge adjustment in the factory-setting: Result: perfectly on point!

STEREO-TEST

SOUND LEVEL 57%

PRICE/PERFORMANCE



OUTSTANDING

Cable Guru



Recently some cables from Australia reached our office, which reminded us of the Eichmann Bullet Plug. That was no coincidence.

Tom Frantzen

In the early 40's RCA developed the "Cinch" two-pole connector. It quickly became the standard for unbalanced audio, and for about half a century it remained practically unchanged – apart from minor mechanical details such as the locking compression fittings. Until an Australian named Keith Louis Eichmann started reducing the masses, the geometry and the ratios of the conductors to each other. Suddenly the differences between the connectors grew beyond those between cables! The Bullet Plug was born. That was a good 16 years ago, but in the meantime the formula was also transferred to loudspeaker connections. There, experienced listeners had already noticed that hollow bananas often sounded better than their solid brothers. Today, Keith Louis Eichmann is working on the construction and alloy of the patented "KLEI Harmony (Bullet) Plug" at his company KLEI Innovations.

The signal conductor is hollow, the ground contact point is exactly defined to avoid eddy currents and the ratio of signal conductor to ground conductor (ratio) is decisive, as well as the alloy. He strictly avoids bad

LENGTHS & PRICES

KLEI gZERO1 IC (NF/Cinch)

Preassembled stereo set in 1 meter length for 365 Euro

KLEI zPURITY88 IC (NF/Cinch)

Preassembled stereo set in 1 meter length for 2500 Euro

KLEI QPURITY8 SC (LS-Kabel)

Preassembled stereo set in 2 meter length for 1965 Euro



Keith L. Eichmann is not only an inventor, but also a very sympathetic guy.

conductors such as tin (15 %), palladium/platinum (16 %), brass (25-37 %), rhodium (35-38 %) and even gold (65-75 %). Instead, his connectors are based on copper (100 %) and achieve up to 106 % conductivity with the metallurgical silver variants called "Harmony".

It goes without saying that this philosophy is continued in the cables. Instead of the usual focus on the conductor and the lowest possible inductive resistance – in the case of loudspeaker cables or connection cables – he aimed at a grounding which has as little as possible interactions with the conductor, as, according to Eichmann, it influences the phase and leads to smudge-effects. Eichmann does not disclose the internal cable structure.

At STEREO we had the gZERO1 IC entry-level connecting cable, one of the zPURITY88 IC top connecting cables and the QPURITY8 SC loudspeaker cables at our disposal for assessing Eichmann's philosophy. These cables were initially allowed a rather long break-in period, as KLEI recommends up to several hundred hours for this process.

Already the somewhat thinner Cinch connector 1 IC, equipped with copper connectors, was striking for its astonishingly

METALLURGY, ARCHITECTURE AND ELECTRICS

While most cable manufacturers focus on a cable's impedance, KLE Innovations, while not completely ignoring it, rather focuses on material strength, ratio, conductivity and active elimination of any crosstalk from ground to signal conductor, skin effects or eddy currents – all of that often already in the connector. From the outside, the cables



are rather unspectacular, especially the thin loudspeaker ones (2) with the low-mass hollow bananas in a plastic dress. At first glance, this seems difficult to justify given the price of around 2000 Euros, however it is part of the concept. Audiophiles who prefer self-assembly, should definitely take a look at the connectors, which are available in four different qualities, from „Copper Harmony“ to „Absolute Harmony“. The gZero 1 IC (1) has to be seen as a highlight for the professional class, the zPURITY88 IC and the QPURITY8 SC are outstanding without any ifs and buts. Highly musical – respect!

clear musical performance, its enormous purification and effortlessness. This went hand in hand with superb speed as well as never appearing "slim", as is the case with some other cables.

This "directness" was already noticeable with earlier and simpler bullet plug-ETI cables. In the range around 400 Euro it is certainly first-class. As expected, these impressions increased in all criteria with the more elaborate and much more expensive 88, which also has the Absolute Harmony connectors with the silver alloy. Now, there was even finer detail resolution and more "air", i.e. increased sovereignty and authority, e.g. in the bass, dynamics, body and color. However, – as we expect from high-end cables – also the imaging properties were significantly enhanced. If you like, it is comparable to the difference between a DVD and a Blu-ray. This is now one of my absolute favorites!

Don't let yourself be fooled by the appearance of the loudspeaker cables. Regardless of the rather slim appearance, it is just as great in terms of both spatial and acoustic depth. The dynamics were downright explosive and relentless, with not a trace of soft-warm timbre. In contrast to many other cables, there is one thing the KLEI are certainly not: filters. An absolute must-listen! ■

CONTACT

KLE Innovations
+61 (0)406614044,
kleinnovations.com

STEREO®

STEREO-MAGAZINE.COM

REINER H. NITSCHKE Verlags-GmbH

Eifelring 28, 53879 Euskirchen

Telefon: +49 2251 65046 0

Telefax: +49 2251 65046 49

Herausgeber:

REINER H. NITSCHKE

Chefredakteur:

VOLKER PIGORS

Sonderaufgaben:

MATTHIAS BÖDE

Geschäftsführender Redakteur:

MICHAEL LANG

Redaktion:

ANDREAS KUNZ, TOM FRANTZEN,

Dipl.-Ing. ULRICH WIENFORTH

Übersetzung:

JULIAN KIENZLE

STEREO-Messlabor:

Dipl.-Ing. ULRICH APEL

STEREO-Fotostudio:

JOACHIM ZELL

Grafische Gestaltung:

DANIEL SCHIEPE

Anzeigenleitung:

ILHAMI DÜZGÜN

Telefon: +49 2251 65046 20

Telefax: +49 2251 65046 29

email: marketing@stereo-magazine.com

Anzeigenabwicklung:

ANDREA ENGELS

Telefon: +49 2251 65046 22

Telefax: +49 2251 65046 29

email: andrea.engels@nitschke-verlag.de

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